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ABSTRACT

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A system for monitoring the behavior and environmental conditions of a high precision electronic apparatus comprising a measuring device section (M) including a plurality of sensors (12,13,14,15,16 and 17) arranged around said high precision electronic apparatus (P) which is mounted on a vibration preventing mount (B) for detecting environmental conditions as analog data signals, and means for filtering and amplifying each of said analog data signals (20,21 and 22), and a computer system section (C) connected with said measuring device section (M) having an A/D convertor (32) for converting said analog data signals into digital data signals, a data collection circuit (34) for collecting said digital data, means (38) for recording and setting prescribed allowable environmental condition data, means (39) for comparing said allowable environmental condition data with said digital data, means (40) for producing warning signal if abnormalities between said allowable environmental condition data and said digital data obtained in operation of said apparatus, a Fast Fourier Transform (FFT) analyzer (41) for converting said digital data so as to display as a graph on a monitor (37), a read-only memory (42) for storing said digital data, means (43) for calculating fluctuation of said magnetic flux data, means (44) for calculating fluctuation of said vibration data, and means (45) for storing said fluctuation of said magnetic flux and vibration data as temporal data.